OBJECTIVES: Knowing the burden of community-acquired pneumonia (CAP) is important for taking preventive measures. This study aimed to calculate the direct costs of CAP in adults >18 years old. **METHODS:** Data of outpatients and inpatients with CAP from 18-month period were retrospectively evaluated. Numbers of radiological and laboratory analyses, hospital stay (day), and specialist visits were multiplied by the relevant unit costs and the cost per patient was calculated. Total drug costs were calculated by multiplying daily drug cost with medication day for each drug for inpatients and by based on packet price of each drug for outpatients. Costs were expressed as median (minimum-maximum). **RESULTS:** The mean ages were 61.56±17.87 years in inpatients (n=208, 51.4% males) and, 53.78±17.46 years in outpatients (n=211, 53.6% males). The ratios of being ≥65 years old in inpatients and outpatients were 48.6% and 28.9%, respectively. Among inpatients, 36.5% had chronic obstructive pulmonary disease (COPD) and18.3% had hypertension. Among outpatients, 22.7% had COPD and 20.4% had asthma. The total cost was 300.01€ (75.11€-9,870.16€) for inpatients and 39.43€ (5.34€-230.34€) for outpatients. Drug cost had the highest share of total cost both in inpatients and outpatients. In inpatients, total cost was 345.21€ (75.11€-9,870.16€) in those ≥65 years old and 283.35€ (79.13€-3,785.71€) in those <65 years old (p=0.014); this difference was not found in outpatients. The total cost was 633.73€ (313.11€-4,375.23€) in inpatients hospitalized more than once and 270.67€ (75.11€-9,870.16€) in those hospitalized once (p<0.001). In inpatients with and without comorbidities, total costs were 308.14€ (75.11€-9,870.16€) and 221.08€ (92.20€-3785.71€), respectively (p=0.016). In outpatients with and without comorbidities, total costs were 44.97€ (5.34€-230.34€) and 26.56€ (5.34€-110.96€), respectively (p<0.001). **CONCLUSIONS:** Costs were higher in patients with advanced age, having comorbidity, and hospitalized more than once. For decreasing the economic burden of CAP on healthcare system, preventive measures should be taken.

PRS25

THE ASSOCIATION BETWEEN SMOKING CESSATION OUTPATIENT VISITS AND TOTAL MEDICAL COSTS: AN ANALYSIS OF JAPANESE EMPLOYEE BASED PUBLIC HEALTH INSURANCE DATA

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OBJECTIVES: The purpose of this study was to estimate short-term medical cost savings, including costs not directly associated with Smoking Cessation Outpatient Visits (SCOVs), from claims data of employee based public health insurance in Japan. **METHODS:** We conducted two analyses using claims data from January 2005 to December 2013 provided by Japan Medical Data Center Co., Ltd. In the first analysis, we compared medical costs composed of inpatient, outpatient, and medications of the SCOV group, smokers having SCOVs, with those of non-SCOV group for each year. The first day of index year 0 is the day of first SCOV for the SCOV group and is the day after one observation year for the non-SCOV group. In the second analysis, among smokers with SCOVs, a mean increase ratio of medical costs was calculated, varying by the number of SCOVs. **RESULTS:** In the first analysis, medical costs per patient per years (PPPYs) of the SCOV group were ¥95,200 at year -1, ¥173,400 at year 0, ¥130,900 at year 1 and ¥116,100 at year 5, and PPPYs of non-SCOV group were ¥95,200 at year -1, ¥100,700 at year 0, ¥108,100 at year 1 and ¥125,900 at year 5. The PPPY of SCOV group at year 0 was higher than that of non-SCOV group at year 0 but the relation was reversed at year 5. In the second analysis, the mean increase ratio of medical costs of the one-SCOV group was the highest, 58%, and that of five-SCOV group was the smallest, 34%. This measure showed a downward trend. **CONCLUSIONS:** Results are suggestive of a possibility that the future medical costs of patients with smoking cessation outpatient visits are lower than those without smoking cessation outpatient visit and increasing the number of smoking cessation outpatient visits decreases the mean increase ratios of medical costs.

PRS26

COST CONSEQUENCE OF PREVENTIVE TREATMENT WITH OM 85 BACTERIAL LYSATE COMPARED TO THE SAME PATIENTS WITHOUT OM 85 THE PREVIOUS YEAR IN ALLERGIC RHINITIS, ASTHMA AND COPD IN ARGENTINA

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OBJECTIVES: To evaluate the cost efficiency of preventive treatment with OM 85 in patients with AR, asthma and COPD compared to the same patients the previous year only receiving standard of care. **METHODS:** This multi-centre, clinical trial was conducted in Argentina in 2010. Eighty-four patients with COPD, allergic rhinitis (AR) and asthma aged 16-65 years who had not received a bacterial lysate in 2009 were included. In 2010, the same patients received OM-85 bacterial lysate capsule. Capsules were administered daily for 10 consecutive days per month for a duration of 3 consecutive months. **RESULTS:** the number of reinfections and exacerbations in the OM 85 arm was decreased from 85% to 45.5% (p< 0.05) and from 65.7% to 34.9% (p<0.05) vs the previous year, respectively. Hospitalizations were 2% in the OM 85 group and 12% for the previous year. The average total cost per patient per month with AR caused by reinfections and exacerbations was 448.9 ARS and 269.9 ARS in the OM 85 arm compared to 660.40 ARS and 574.40 ARS in the previous year. In patients with asthma total cost for reinfections and exacerbations was 487.9 ARS and 473.9 ARS in the OM 85 arm compared to 1'144 ARS and 970 ARS in the previous year. Reinfections and exacerbations total cost in COPD patients was 1356.5 ARS and 1217.5 ARS in the OM 85 patients but amounted to 1'708.2 ARS and 1599.6 ARS, respectively, in the previous year. **CONCLUSIONS:** Preventive treatment with OM 85 in patients with allergic rhinitis, asthma and COPD significantly reduces reinfections rates, exacerbations and hospitalizations compared to the previous year. Associated cost savings have been substantial and ranged from 15% to 60% vs previous year (no prophylaxis).

PRS27

CLINICAL AND ECONOMIC BENEFITS ASSOCIATED WITH LESS USE OF FLUTICASONE IN PEDIATRIC PATIENTS WITH PERSISTENT ASTHMA TREATED WITH HIGH DOSES OF SPECIFIC ALLERGEN IMMUNOTHERAPY TO MITES

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OBJECTIVES: The existing guidelines recommend the minimum effective dose of inhaled corticosteroids in children with persistent asthma. Clinical studies and recent Cochrane reviews stablish the existence of a significant difference in the growth rate of pediatric patients that receive corticoids against those who do not receive them1-5. Another study showed that pediatric patients treated with subcutaneous immunotherapy (IT) to house dust mites required a significant lower dose of fluticasone propionate (PF). Quantify the savings associated with the dose decrease of PF in pediatric patients with allergic asthma treated for three years with high dose specific-allergen immunotherapy to mites **METHODS:** The average reduction of PF comes from an observational, randomized, three years prospective study (N=65; 33 treated with IT+FP). The number of containers per patient were calculated as well as its economical savings regarding the baseline situation. The immunotherapy used and the PF were accounted for by means of RRP. **RESULTS:** The PF accumulated savings is equivalent to 29,3% of the immunotherapy pharmacological costs. Since PF is a reduced contribution medication, the savings for the NHS are 44,9%-67,3% and 5,9%-3,9% for the patient depending on the income range. **CONCLUSIONS:** Adding high dose specific-allergen immunotherapy to mites to pharmacological treatment retains control over the allergic asthma and reduces the use of corticoids, consequently minimizing the impact on the growth rate of the patients and generates economical savings.

PRS28

ECONOMIC ANALYSIS OF COST OF DRUG TREATMENT INVOLVED IN THE MAINTAINANCE THERAPY OF COPD

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OBJECTIVES: To calculate the fluctuation in the drug cost involved in the treatment of Chronic Obstructive Pulmonary Disease (COPD) during 2013-2015. **METHODS:** Standard treatment guidelines (STG), 4th edition were perused to understand the management of COPD. Current Index of Medical Specialities (CIMS) Oct - Jan 2013, 2014 and 2015 issue were used to capture the price of drugs. One day cost of treatment and its variation was studied. **RESULTS:** According to STG, drugs needed for the maintenance treatment of COPD includes Salbutamol inhaler 200mcg 4 times a day or Terbutaline 250mcg inhaler, Ipratropium bromide 200mcg inhaler 2 times a day, Theophylline 100mg tablets 3 times a day, Amoxicillin + Clavulanic acid (500mg + 125mg) injection 3 times a day, Fluticasone 100mcg inhalation once a day, Montelukast tablet 5mg once a day. The minimum and maximum difference in cost of one day maintenance was found to be 136%, 182% and 169% in the year 2013, 2014 and 2015 respectively. This fluctuation was observed by totaling the price of all the drugs mentioned above. **CONCLUSIONS:** Wide variation exists between the minimum and maximum cost of maintainance therapy of COPD. Government should take some step in order to regulate and to bring uniformity in price. So that it can be affordable by a common man which will ultimately improve the compliance and reduce the economic burden.

PRS29

TO STUDY THE CLINICAL CHARACTERISTICS, TREATMENT PATTERN AND FACTORS ASSOCIATED WITH THE TOTAL HOSPITAL COST IN ACUTE RESPIRATORY DISTRESS SYNDROME IN TERTIARY CARE HOSPITAL

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OBJECTIVES: To analyze the clinical symptoms, treatment pattern, outcomes and factors associated with total cost of treatment. **METHODS:** A retrospective cross sectional study was conducted in tertiary care hospital. The patient details such as demographical data, clinical features, treatment and outcome were collected from the Medical Records Department. The total cost of treatment was collected from Finance Department. Data were analyzed by using SPSS 20.0 **RESULTS:** Mean age of the study population was found to be 42.7±18.2 year with majority of male 94(52.2%). Sepsis (59(32.8%)) was the most common etiology for ARDS in our study population. Analysis of 180 cases showed that total number of hospitalization days were 1793 and total cost of treatment was 11,005,448 INR. The patients who received corticosteroid therapy before 48 hours had better recovery rate. Mean ventilation days in the group of patients who received early glucocorticoid therapy were less (9.29±6.06) then those who received late therapy (13.64±6.03) **CONCLUSIONS:** Mortality rate associated with ARDS was relatively high. Management with steroids has no special benefit in reduction in mortality rate. Time of start of steroid therapy plays an important role in the management and was observed that early start of steroid therapy showed better recovery rate as well as reduction in hospitalization and ventilation days. The total treatment cost for the management of ARDS is relatively high.

PRS30

PULMONARY ARTERIAL HYPERTENSION (PAH): REAL-WORLD TREATMENT PATTERNS, OUTCOMES AND COSTS BASED ON WORLD HEALTH ORGANIZATION (WHO) FUNCTIONAL CLASS (FC)

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OBJECTIVES: Retrospective database studies of PAH using US payer claims data have limitations due to lack of specific ICD-9 codes for PAH and ability to identify patient severity. A previous study validated an algorithm including patients with non-specific PH codes and a claim for an advanced PAH drug therapy. This study used provider-reported disease severity – FC – to examine the impact of FC on healthcare